GOVERNMENT OF INDIA
RAILWAYS
LOK SABHA

UNSTARRED QUESTION NO:2250
ANSWERED ON:03.08.2015
Anti Collision System in Trains
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Will the Minister of RAILWAYS be pleased to state:

(a) whether the field trials of Train Collision Avoidance System (TCAS) have been successfully conducted by Research, Design and Standard Organisation (RDSO);

(b) if so, the details thereof;

(c) the details of advantages of TCAS over Anti Collision Device (ACD) and Train Protection and Warning System (TPWS);

(d) the time by which TCAS is likely to be operationally deployed in trains; and

(e) the estimated amount of funds required for nationwide deployment of TCAS?

Answer

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS

(SHRI MANOJ SINHA)

(a) Initial limited trials have been conducted.

(b) The initial limited field trials of Train Collision Avoidance System (TCAS) have been conducted in Tandur-Kurgunta Section (approx. 32 Kms) of Secunderabad Division of South Central Railway in which key safety features like prevention of Signal Passing At Danger (SPAD) and over speeding have been demonstrated by RDSO.

Further extended field trials in large section (250 Kms) Wadi (excluding)-Vikarabad-Bidar-Lingampalli of Secunderabad Division of South Central Railway with 40 Locomotives have been Planned in Financial Year 2015-16.

(c) Advantage over Anti Collision Device (ACD): TCAS is a full fledged Automatic Train Protection (ATP) System and is linked with the signalling system. It prevents collisions due to driver's error of passing signal at Danger or over speeding. In contrast ACD is not an Automatic Train Protection (ATP) System and does not prevent Signal Passing at Danger.
Advantage over European Train Control System Level-1 (ETCS Level-1) - Train Protection and Warning System (TPWS): TPWS is based on European Train Control System (ETCS) Level-1 which is a proven technology and is also a full fledged ATP System. Being imported, the cost is high.
TCAS is being indigenously developed by RDSO in association with Indian Firms at lower cost which is in line with spirit of "Skill India""and "Make in India" mission.

(d)&(e) At this stage no timeframe and estimated amount for nationwide deployment of TCAS in the country can be firmed up.
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